

WHAT IS CLAIMED IS:

1. An electron-emitting device comprising: a pair of conductors provided on a substrate so as to be opposed to each other; and a pair of deposition films containing carbon as a main component which respectively connected to the pair of conductors and disposed with a gap therebetween, wherein sulfur is contained in the deposition film in a range of not less than 1 mol% and not more than 5 mol% as a ratio to carbon.
2. An electron-emitting device comprising: a pair of device electrodes provided on a substrate so as to be opposed to each other; an electroconductive film which is connected to the pair of device electrodes and has a fissure between the pair of device electrodes; and a deposition containing carbon as a main component which is formed in the fissure and on an area including the fissure and has a gap whose width is narrower than the fissure in the fissure, wherein sulfur is contained in the deposition in a range of not less than 1 mol% and not more than 5 mol% as a ratio to carbon.
3. An electron source comprising: a plurality of electron-emitting devices defined in claim 1 or 2 which are provided on a substrate; and a wiring connected to a plurality of the electron-emitting devices.

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4. An image-forming apparatus comprising: an electron source defined in claim 3; and an image-forming member for forming an image by collision of an electron emitting from the electron source.